An underwater photograph showing a large school of fish swimming over a sandy seabed. The water is clear and blue, and the fish are of various species and sizes. The scene is brightly lit, suggesting a shallow depth.

ARTIFICIAL REEFS OF THE SOUTH ATLANTIC

NC, SC, GA, FL

Robert Martore, South Carolina Dept. of Natural Resources
National Artificial Reef Workshop, Alexandria, VA
June 9, 2016

State Sponsored Artificial Reef Programs

NC – mid 1970's

SC – 1973

GA – late 1960's

FL – mid 1960's

**NC – 42 offshore sites – up to 38 miles offshore, 160-ft
20 estuarine sites
Artificial Reef Master Plan**

**SC – 46 offshore sites – up to 50 miles offshore, 300-ft
12 estuarine sites
Artificial Reef Management Plan, 1991**

**GA – 30 offshore sites – up to 70 miles offshore, 160-ft
15 estuarine sites
Strategic Plan under development**

Florida – East Coast

No state managed artificial reef program

Individual counties responsible for reef construction

Artificial Reef Strategic Plan, 2003

> 100 offshore sites – up to 400-ft depth











































AP Photo

Tired but not bored

Adrian Harrold of Rocky Mount, N.C., found a quiet place on Pine Knoll Shores, N.C., to read a book Friday among the tires washed up on the beach from an artificial offshore

reef built years ago. The tires line the beaches along Bogue Banks from Fort Macon State Park to Emerald Isle and were washed ashore because of Hurricane Bonnie.

Fishery Management/Enhancement Applications

- Estuarine sites – nursery grounds, EFH







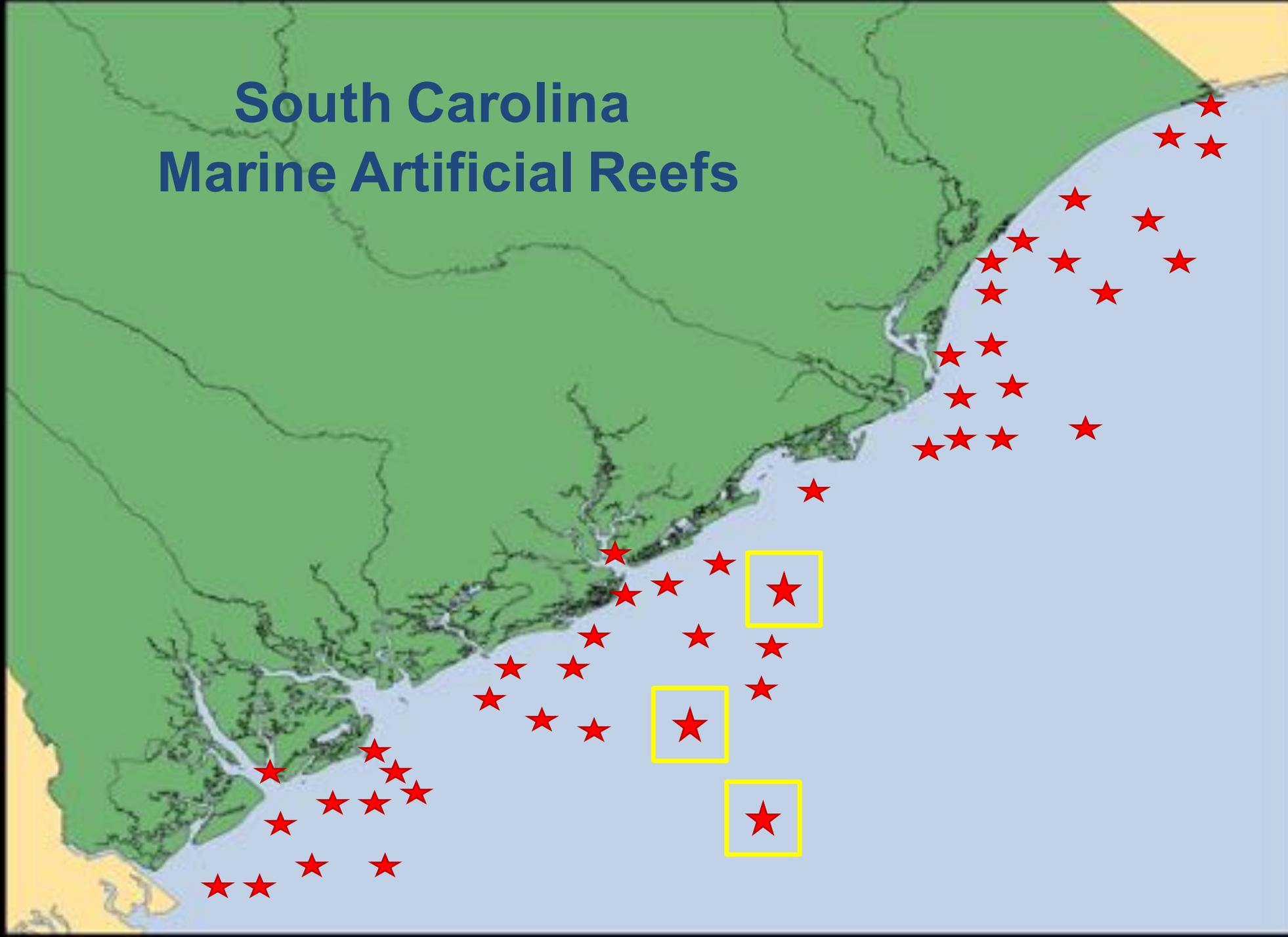
Fishery Management/Enhancement Applications

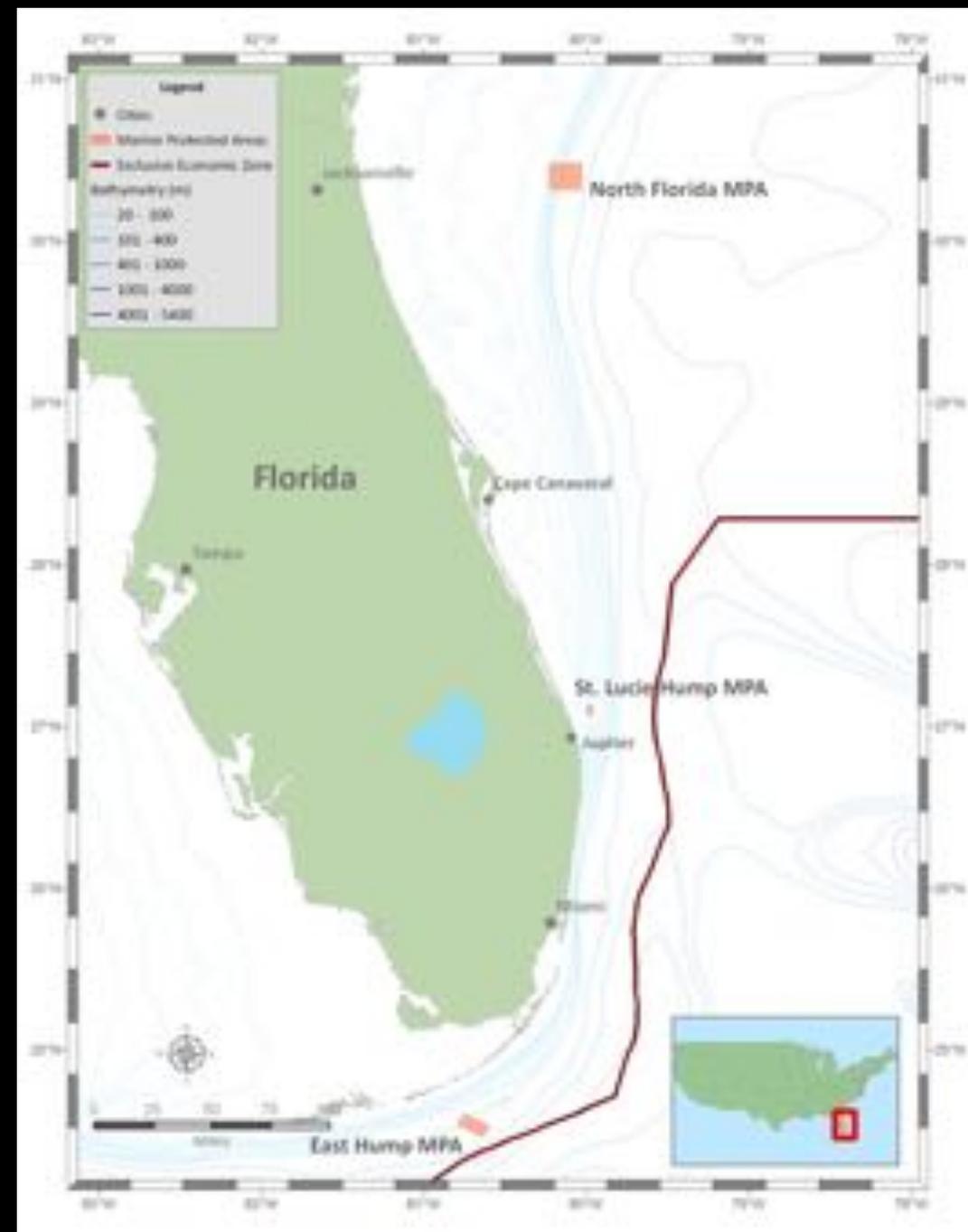
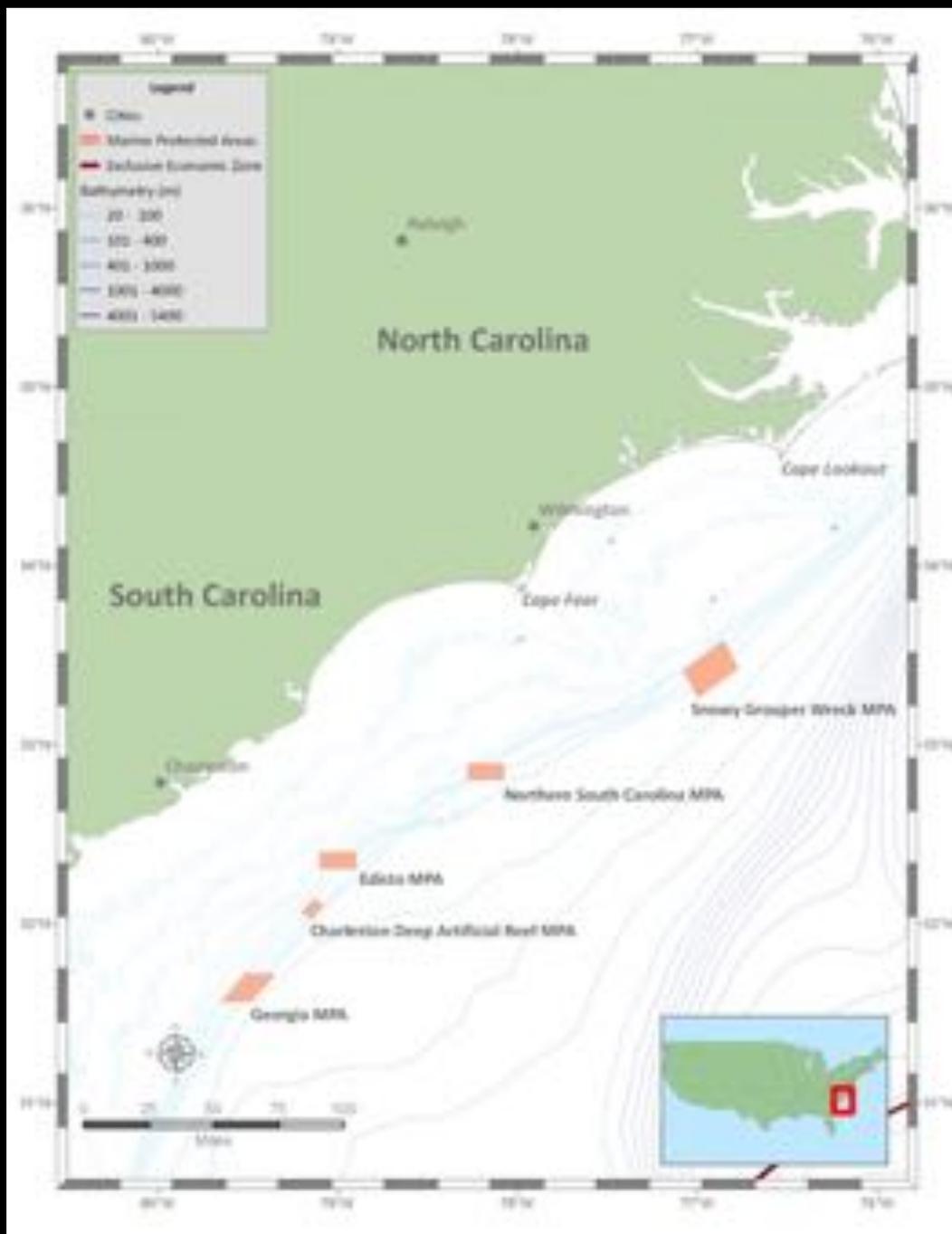
- Estuarine sites – nursery grounds, EFH
- Special Management Zones (SMZ's)
SC - 29, GA - 19, FL - 3
- Marine Protected Areas (MPA's)





South Carolina Marine Artificial Reefs





Other Applications

- Mitigation Reefs
 - Burial from renourishment
 - Loss of habitat due to harbor or channel deepening
 - Ship grounding or anchor dragging
- Research Reefs
- Unpublished sites for Refugia
- Substitution/Protection for natural sites

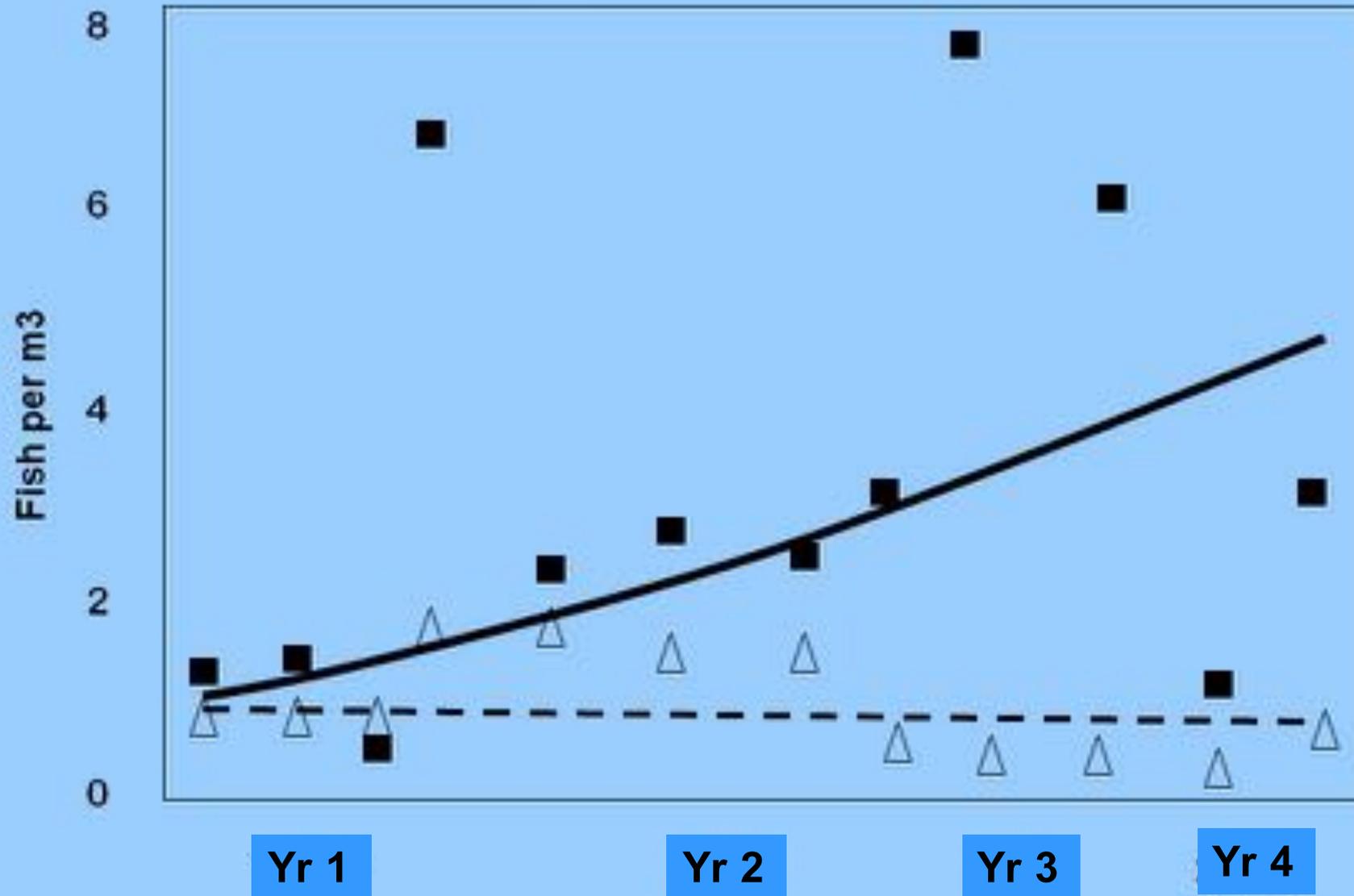
Lessons Learned

Artificial Reefs can be effective fishery management tools

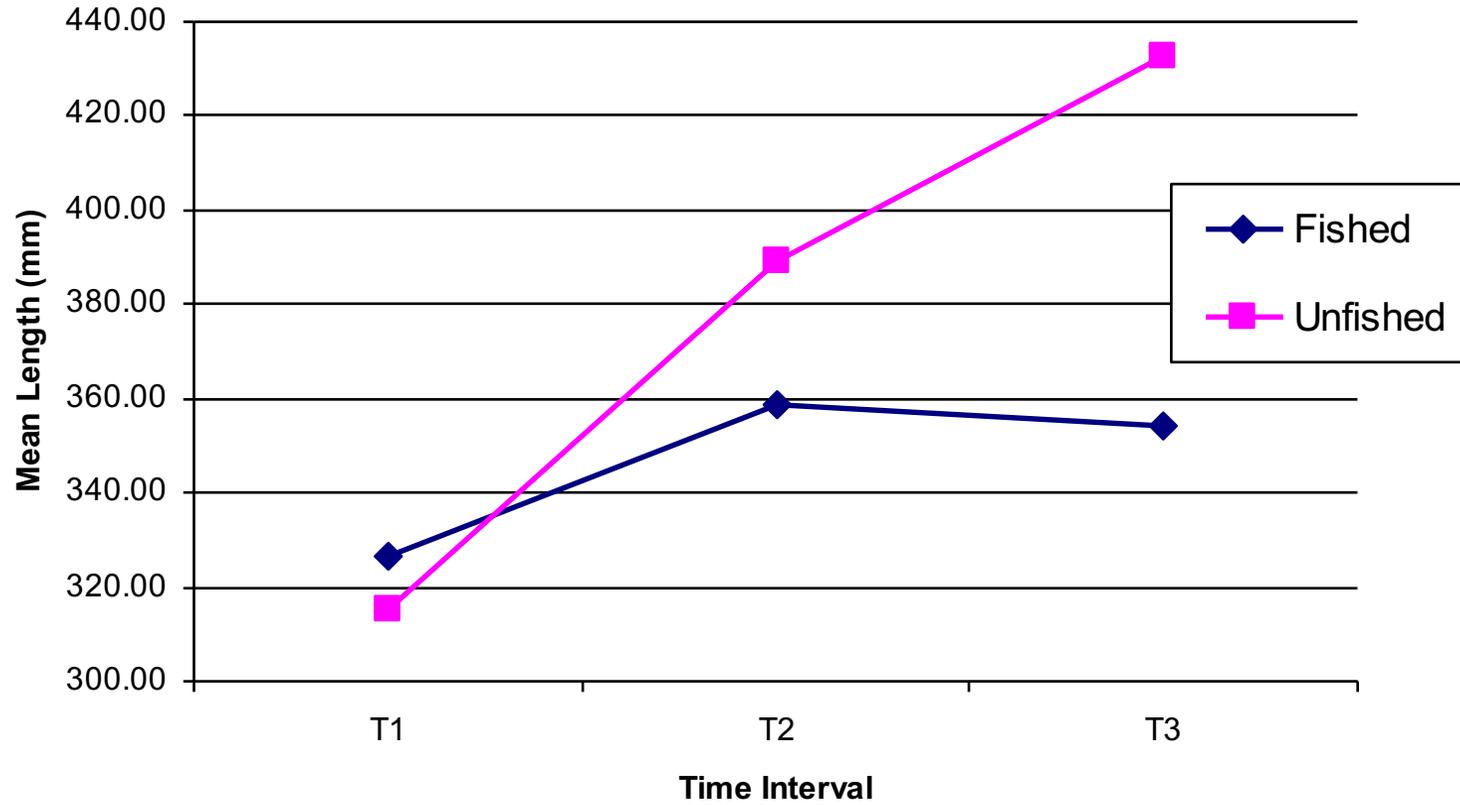
Simply creating more habitat will not create more fish

Fishing pressure almost always determines reef community

Density of Black Seabass



***C. straita* Mean Length: Fished vs Unfished Sites**



TAGGING STUDIES



HIGH SITE FIDELITY

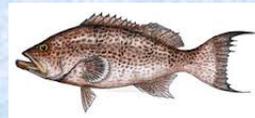
BLACK SEABASS



GAG



SCAMP



RED SNAPPER



TRIGGERFISH



Challenges

Most artificial reefs built with public money

Federal Sportfish Restoration Funds

State Saltwater License Revenues

Protected areas need different funding sources
and/or changing mindsets

